

16 Furthermore, the gas scrubber automatically removes a powder buildup in the heat exchange units 15 of the heater chamber and prevents the powder buildup at the border between the combustion chamber and the wetting chamber so that stoppage of the system to remove the powder is no longer necessary.

**In The Claims:**

Please replace claims 1, 4, 6, 7, 12, 13, 16, and 21 with the amended claims below. A "marked-up" version of each amendment is included in **Attachment A**.

1. (Thrice Amended) A gas scrubber comprising:

a combustion chamber;

a wetting chamber placed below said combustion chamber to form a single unit;

17 a guide plate arranged between the combustion chamber and the wetting chamber for directing a gas from the combustion chamber into the wetting chamber; and

an injection nozzle having an opening adapted to deliver a conditioned gas to a space proximate to the guide plate for minimizing the production and/or accumulation of a powder at an interface between the combustion chamber and the wetting chamber.

4. (Twice Amended) The gas scrubber according to claim 1, wherein the wetting chamber comprises:

an angled bottom surface which collects particulates produced in the wetting chamber; and

18 a water expulsion nozzle having an opening directed to the angled bottom surface for flushing the particulates into a drain.

19 6. (Thrice Amended) The gas scrubber according to claim 5, wherein the combustion chamber comprises a relatively high temperature gas, wherein the wetting chamber comprises a relatively low temperature gas, and wherein the injection nozzle is adapted to prevent the high temperature gas from coming in contact with a substantial portion of the low temperature gas.

7. (Four Times Amended) A gas scrubber comprising:

a combustion chamber for eliminating explosive and flammable elements contained in a gas delivered into the combustion chamber from a gas intake;

a wetting chamber placed below said combustion chamber to receive the gas from the combustion chamber and dissolve a water soluble element of the gas; and

a means for minimizing a powder produced at an interface between said combustion chamber and said wetting chamber, wherein said means for minimizing a powder comprises a means for delivering a conditioned gas to said interface.

---

12. (Twice Amended) The gas scrubber according to claim 9, wherein the combustion chamber comprises a nitrogen delivery nozzle having an opening directed into the heating chamber, and wherein the nitrogen delivery nozzle directs nitrogen across an interface proximate to the multiple heat exchange units.

13. (Twice Amended) The gas scrubber according to claim 9, wherein the multiple heat exchange units comprise a first row and a second row of heat exchange units, and wherein if power to the first row of heat exchange units is terminated, power to the second row of heat exchange units is increased.

---

16. (Twice Amended) The gas scrubber according to claim 15, wherein a bottom portion of said case is configured in a v-shape to collect sludge residing in said bottom portion, wherein said sludge comprises particles entrained in water, and wherein said wetting chamber further comprises:

a drain coupled to receive said sludge from said bottom portion; and

a water nozzle coupled to a side of said bottom portion.

---

21. (Twice Amended) The gas scrubber according to claim 7, wherein said means for minimizing a powder includes:

a guide plate comprising a funnel-shaped guide configured to direct the gas from said combustion chamber to said wetting chamber; and